

Organizational Transformation in the AWS Cloud

How Enquizit Helped a Nonprofit Revitalize Its Culture and Further Its Mission

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Business leaders often think of cloud migration as a way to solve a problem using technology: it's about security, efficiency, or eliminating the costs associated with an expensive data center. But cloud migration is much more than that.

For Child Care Aware of America (CCAoA), migrating to the AWS Cloud was an opportunity to revolutionize their organization both technologically and culturally. The 501(c)3 organization serves as an advocate in the child care space, connecting military and Department of Defense (DoD) families with a network of thousands of child care providers nationally. But despite their enormous impact, the organization's growth was hampered by outdated technologies and processes. When presented with a time-sensitive opportunity to significantly further their mission to "advance a child care system that effectively serves all children and families," they looked to AWS and Intel for the technological solution, and to AWS Advanced Consulting Partner Enquizit to help them rethink how they do business from the ground up. In this e-book, we'll share CCAoA's story and explain how they transformed not only their infrastructure but also their organization's approach to technology.

1 Outgrowing an Old Platform

Much of CCAoA's contract work depends on a platform called the Fee Assistance Portal (FAP), which enables contract deliverables for various military branches—like the U.S. Army, U.S. Navy, U.S. Air Force and U.S. Marines. Military families use the platform to apply and submit verification documents, receive approval for fee assistance, and select a child care provider from Child Care Aware of America's extensive network. In addition to families that use FAP, the child care providers in CCAoA's network also interact

with the platform to apply and submit verification documents, receive approval for their certification to serve military families, and receive fee assistance.

But CCAoA had a problem. The Fee Assistance Portal was more than 10 years old, and the technical limitations were causing slowdowns across all parts of the system. The platform was designed to meet user expectations at the time it was built—but now, CCAoA's staff members were being held back by the outdated technology, which lacked the user-friendly features and responsiveness that they needed to effectively serve today's tech-savvy families. On top of that, the organization was concerned about performance and availability—they wanted to guarantee 99.999% uptime and ensure that the platform's performance met the needs of the growing number of families taking advantage of fee assistance.

A Problem of Scale

Child Care Aware of America wanted to further its mission to see all families across America have access to quality and affordable child care. The continued leadership contracting with the military has proven an excellent model. But the non-profit org's existing platform wasn't up to the challenge of providing these same opportunities for civilian families. In order to expand these programs for families, CCAoA needed a new solution—which it found in the AWS Cloud.



2 Finding a Home in the AWS Cloud

As a first step, Child Care Aware of America moved its existing platform into the AWS Cloud via a simple “lift and shift.” But they knew a basic migration would only replicate the old problems in the new cloud environment. The CCAoA team envisioned a flexible and scalable platform that would serve them well into the future, growing with them so they wouldn’t find themselves needing another major overhaul 10 years later. The AWS Cloud offered everything they were looking for: accessibility, security, and the ability to maintain the infrastructure and deploy updates in a modular way.

In short, the CCAoA leadership knew they were ready to commit to a long-term home in the AWS Cloud—but where to start? For help with both articulating the vision and designing the solution, they called in Enquizit.

Leveraging the Power of AWS

When CCAoA set out to replace their old platform, the AWS Cloud was the obvious solution. AWS is secure and scalable, with a wide range of native, cloud-based tools to support application development. Plus, AWS’s cost optimization features help the non-profit org stay on budget.

3 Leveraging Human-Centered Design

Enquizit is not only an AWS Advanced Consulting Partner, but they’re also one of the few providers who use human-centered design to build their cloud solutions. As a nonprofit with a human-service mission at its core, CCAoA wanted to [bring that approach](#) to its application. Human-centered design is a unique problem-solving technique that centers user experience and the human perspective at every step. It’s not always easy to implement, but it can transform an organization’s culture when it’s done right. Here are the steps Enquizit has created to make it happen:

1. Define business objectives

Often, culture shifts are prompted by new opportunities. CCAoA had been approached by companies that wanted to partner, but they didn’t have the technology or business processes in place to make it happen. The promise of that recurring revenue stream and the ability to expand their mission to more families inspired them to make the change.

The organization’s primary business objectives were to create new, scalable processes that would keep personnel costs down while expanding their application to a more extensive customer base. As they scaled up, it was also important to them to maintain their commitment to their mission.



2. Understand the user's needs

Before they made changes, CCAoA wanted to be sure they genuinely understood the needs of parents, child care providers, and their own internal team members.

To understand what users wanted from a new application, Enquizit and CCAoA needed to talk to the users themselves. First, they recruited users via surveys and interviews to better understand the challenges they faced. Using that data, the team built a map of all the different constituent groups. They then prototyped user journeys to better understand how parents and child care providers used the platform—and what pain points needed to be addressed first. Finally, Enquizit and CCAoA took this information and used design-thinking methodologies to brainstorm potential solutions.

3. Address technical pain points

The employees and end-users recruited in step two helped define the technical pain points that needed to be addressed in the new solution. These pain points included:

» Storing files

On a regular basis, parents must renew their eligibility for child care benefits. Previously, the files they submitted were stored in an inefficient database that was neither user-friendly nor cost-effective. To solve this problem, the Enquizit team decided to move all files to S3, which offers nearly infinite storage at a low cost. This immediately reduced buffering and improved the functionality of the entire system.

» Enabling users to view their application status

Anxious parents want to see where they are in the approval process after they submit their application. In the past, this had meant the CCAoA team spent hours fielding calls and emails from parents checking on their application's status. The new solution improves transparency by building a parent status tracking functionality into the new architecture. To create this feature, Enquizit and the CCAoA team utilized a number of AWS tools and services, including AWS Cognito, Cloudfront, NLB, S3, and more.

4. Train employees on the new approach

CCAoA knew that investing in employee training would be critical for bringing human-centered design to their organization. With Enquizit's help, they developed a plan to get all employees on board and conducted formal human-centered design training sessions with more than 100 staff members. And to help the CCAoA staff get a sense of what the process looks like in action, Enquizit also modeled the agile human-centered design approach during their brainstorming sessions and workshops. Today, CCAoA has set up its own Human-Centered Design Center for Excellence and has fully embraced this culture shift as part of its overall mission.

5. Keep production costs low

Because CCAoA is a nonprofit, cost was a key factor in their digital transformation. To keep production costs as low as possible without sacrificing design or quality, the Enquizit team used a global delivery team. They also used open-source software on the backend of the application to save money and make the app more flexible and scalable for the future. And leveraging Intel's CPUs, which were found to be the best fit for compatibility, performance, and cost-efficiency, allowed them to maximize their system's reach while reducing costs.



6. Start small

CCAOA also followed one of the key principles of human-centered design by starting small. To start, Enquizit is helping the organization migrate one subset of their application, called Employee Child Care Solutions (ECCS). The goal for this piece of the migration includes streamlining the onboarding of new child care providers, quickly searching for providers within the system, and making it simpler for any provider to add enhanced references and move to a higher membership level within the app.

With this prototype, which they developed using agile design sprints, CCAoA will validate that the app's front and backend will meet their needs. Plus, it will give them space to

run this smaller subset of the application by their users to get feedback that will shape the rest of the app. The prototype also gives them an existing technology stack to work with, which they can fine-tune as they move the rest of the application into the AWS Cloud. By moving a small section of the app first, they set themselves up for streamlined migration and leave space to incorporate user feedback along the way.

Running on Intel

As the CCAoA solution was developed, decisions were made about which technologies to leverage. At every point in the decision-making process, Intel technology came out on top.

Today, CCAoA's flagship application runs solely on Intel CPUs, which were found to be the best fit for compatibility, performance and cost efficiency.

Every nonprofit aims to be as efficient as possible to serve their mission, and with Intel's CPUs, the organization can maximize its reach to new markets while reducing cost.

Serving America's Families

Child Care Aware of America currently connects tens of thousands of child care providers with military families living on and around the nation's military installations. But they are ready to bring their mission to a much wider audience—and thanks to Enquizit's expertise and the technology backbone provided by AWS and Intel, they are well on their way to achieving that goal by 2022. As CCAoA continues to develop a SaaS solution that will serve America's families, they are also paving the way for other nonprofit organizations to embrace cloud technology, human-centered design, and a more agile approach to fulfilling their missions.

If your organization is looking to embrace human-centered design processes or revitalize legacy software, Enquizit and AWS can help. To learn more, go to enquizit.com.

